

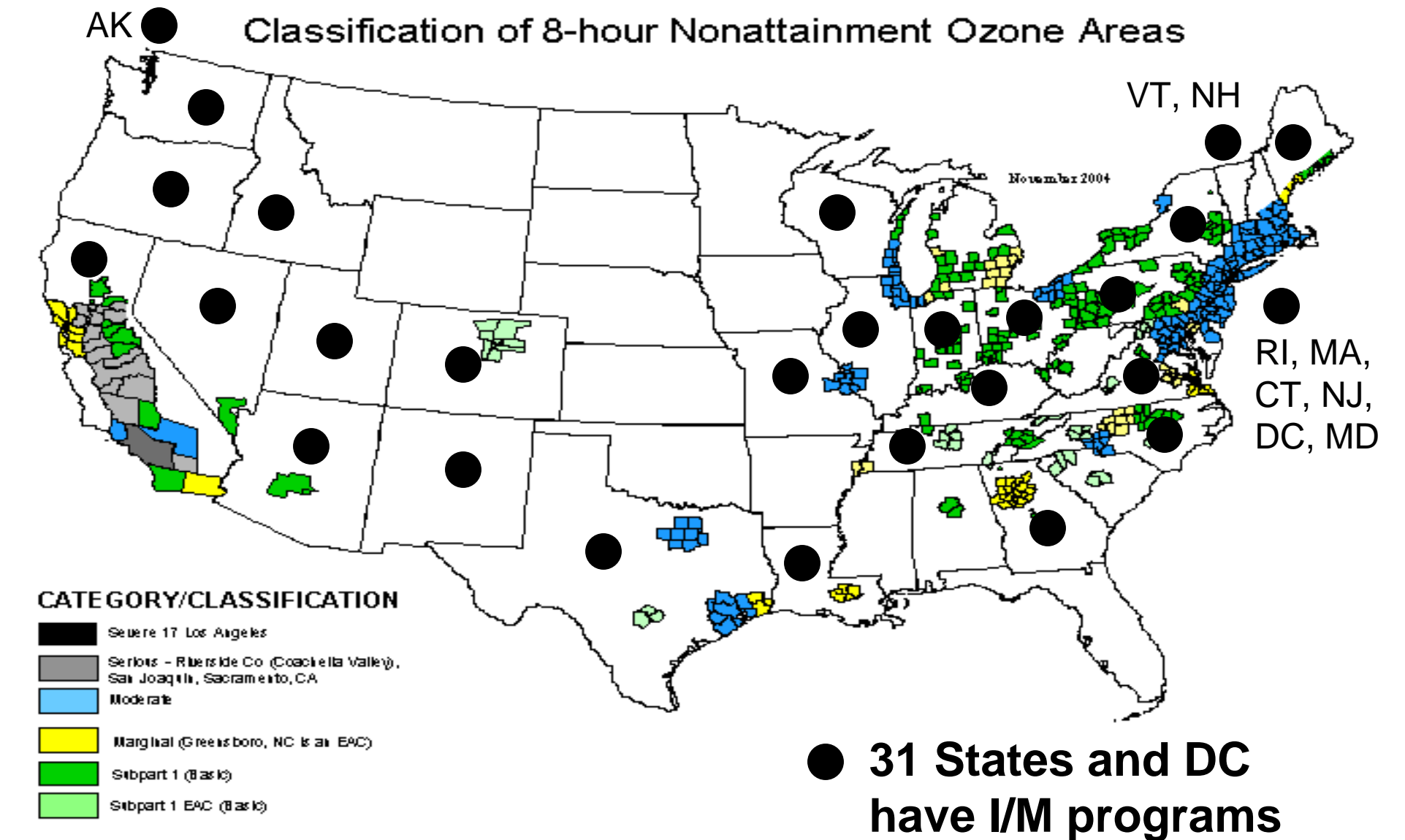
# **EPA R7's Perspective on the St. Louis I/M Program**

**St. Louis I/M Summit**

**7/22/2005**

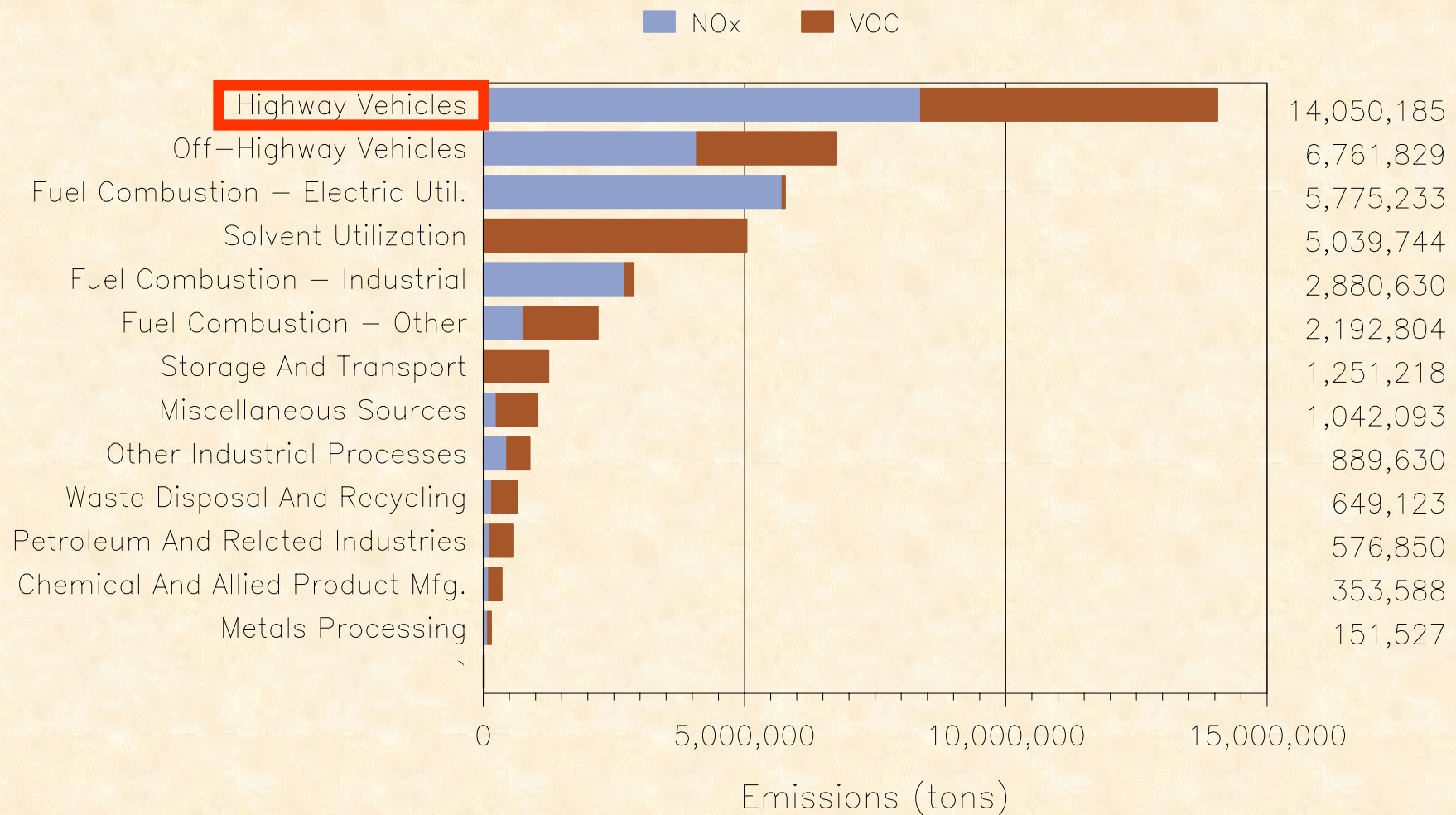
**Josh Tapp, Air Planning & Development  
Branch Chief**

# Where can I/M be Found?



# Why is I/M Important?

## 1999 National NOx & VOC Emissions by Source



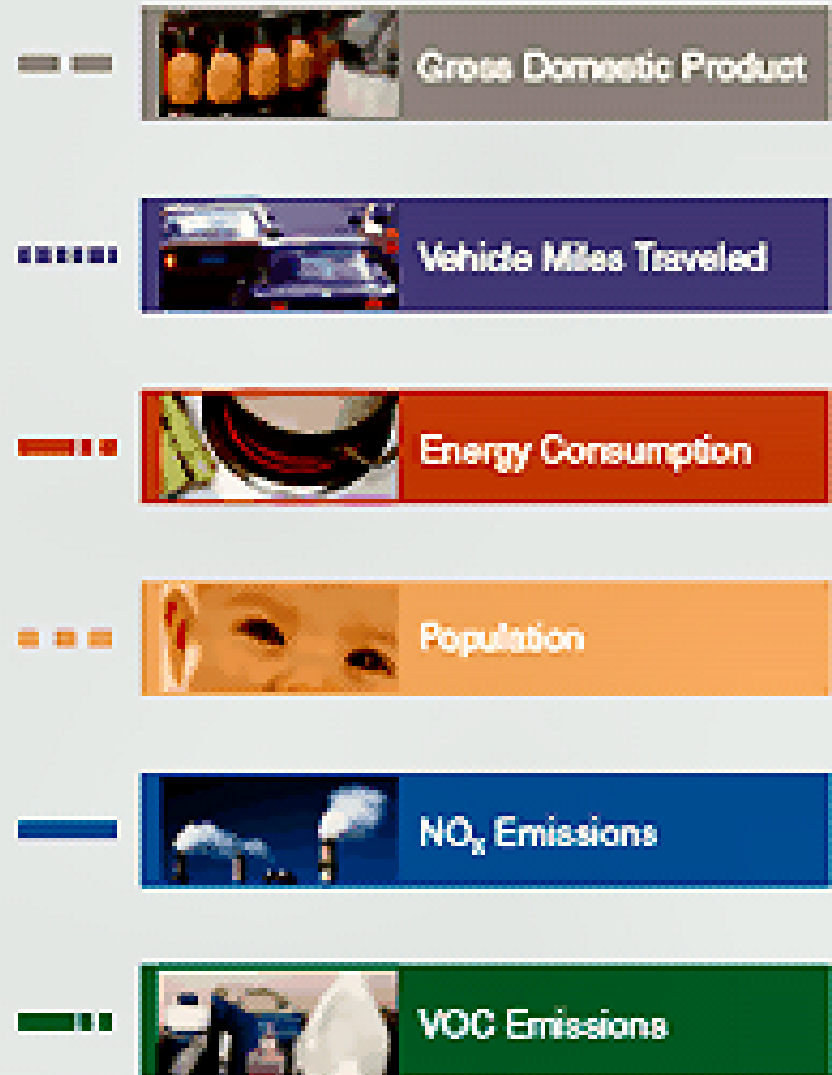
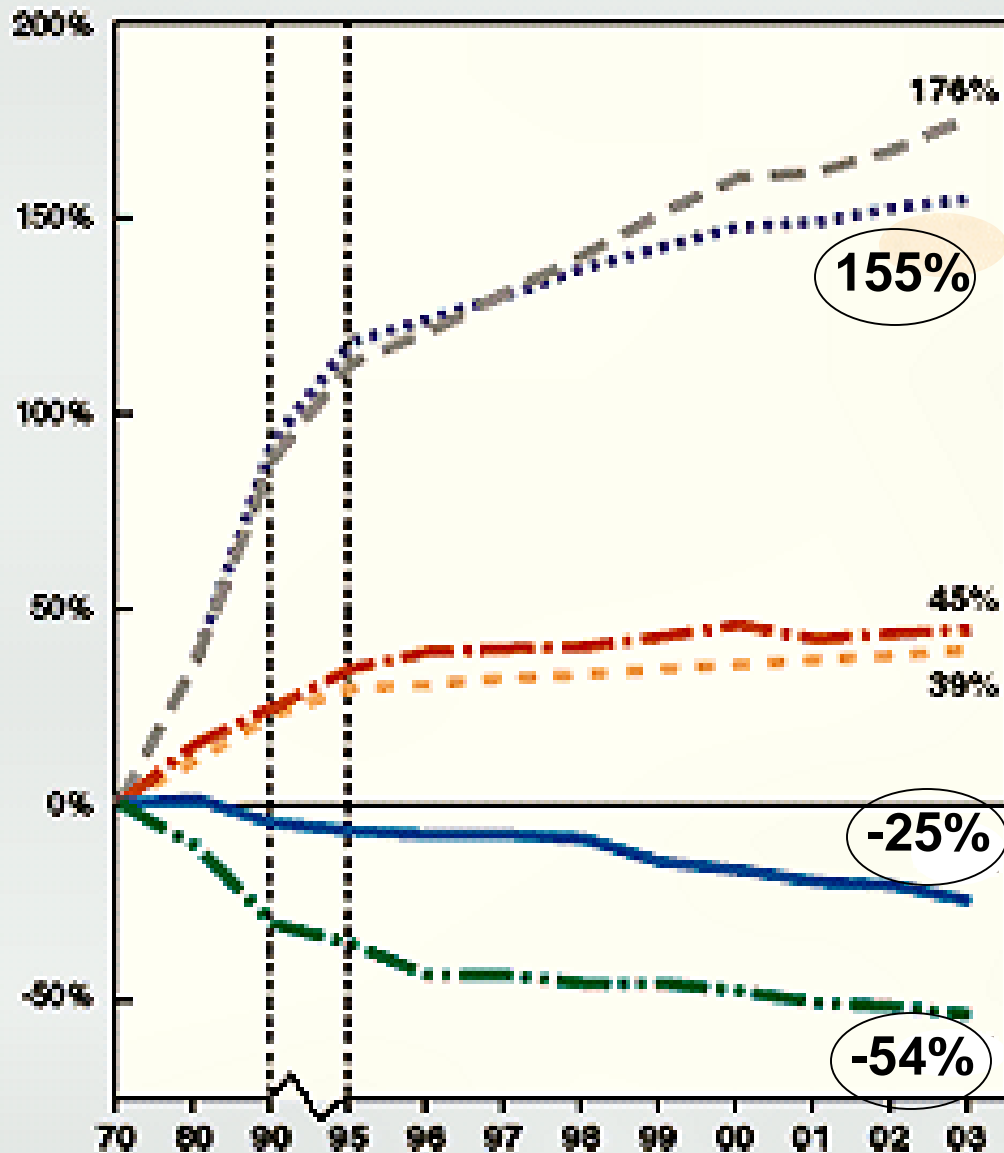


# Why is I/M Important?

## 21 On-Road Mobile Source Air Toxics Emissions from 1996

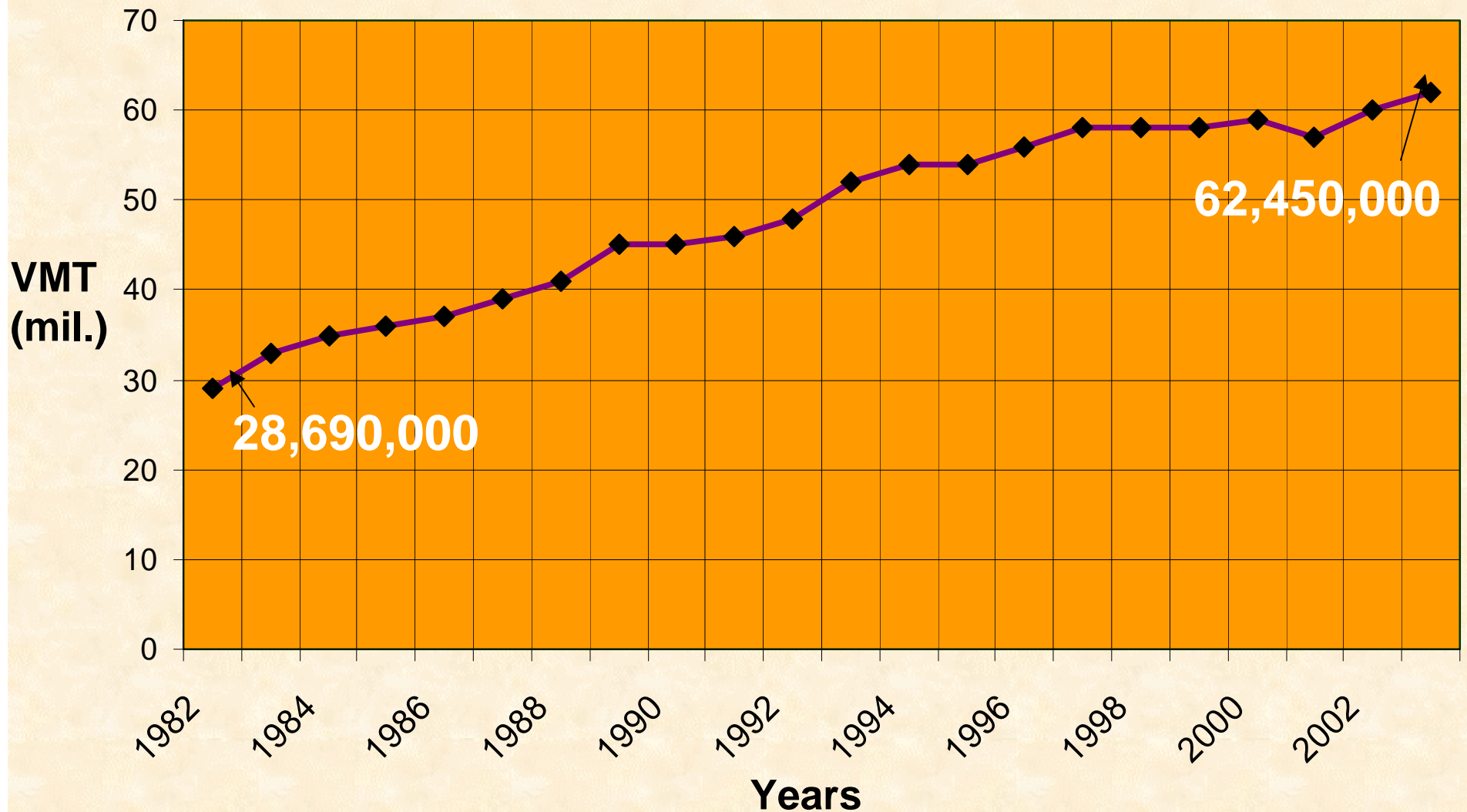
Compound	Tons	% of Total National Emissions
1/3-Butadiene	23,500	42%
Acetaldehyde	28,700	29%
Acrolein	5,000	16%
Arsenic Compounds	0.25	0.06%
<b>i.e. Benzene</b>	<b>168,200</b>	<b>48%</b>
Chromium Compounds	14	1.2%
Dioxins/Furans	NA	NA
Ethylbenzene	80,800	47%
Formaldehyde	83,000	24%
Lead Compounds	19	0.8%
Manganese Compounds	5.8	0.2%
Mercury Compounds	0.2	0.1%
MTBE	65,100	47%
n-Hexane	63,600	26%
Naphthalene	NA	NA
Nickel Compounds	10.7	0.9%
POM (as sum of 7 PAH)	42	4%
Styrene	16,300	33%
Toluene	549,900	51%
Xylene	311,000	43%
Diesel Particulate Matter	182,000	34%

# Why is I/M Important?



# Why is I/M Important for STL?

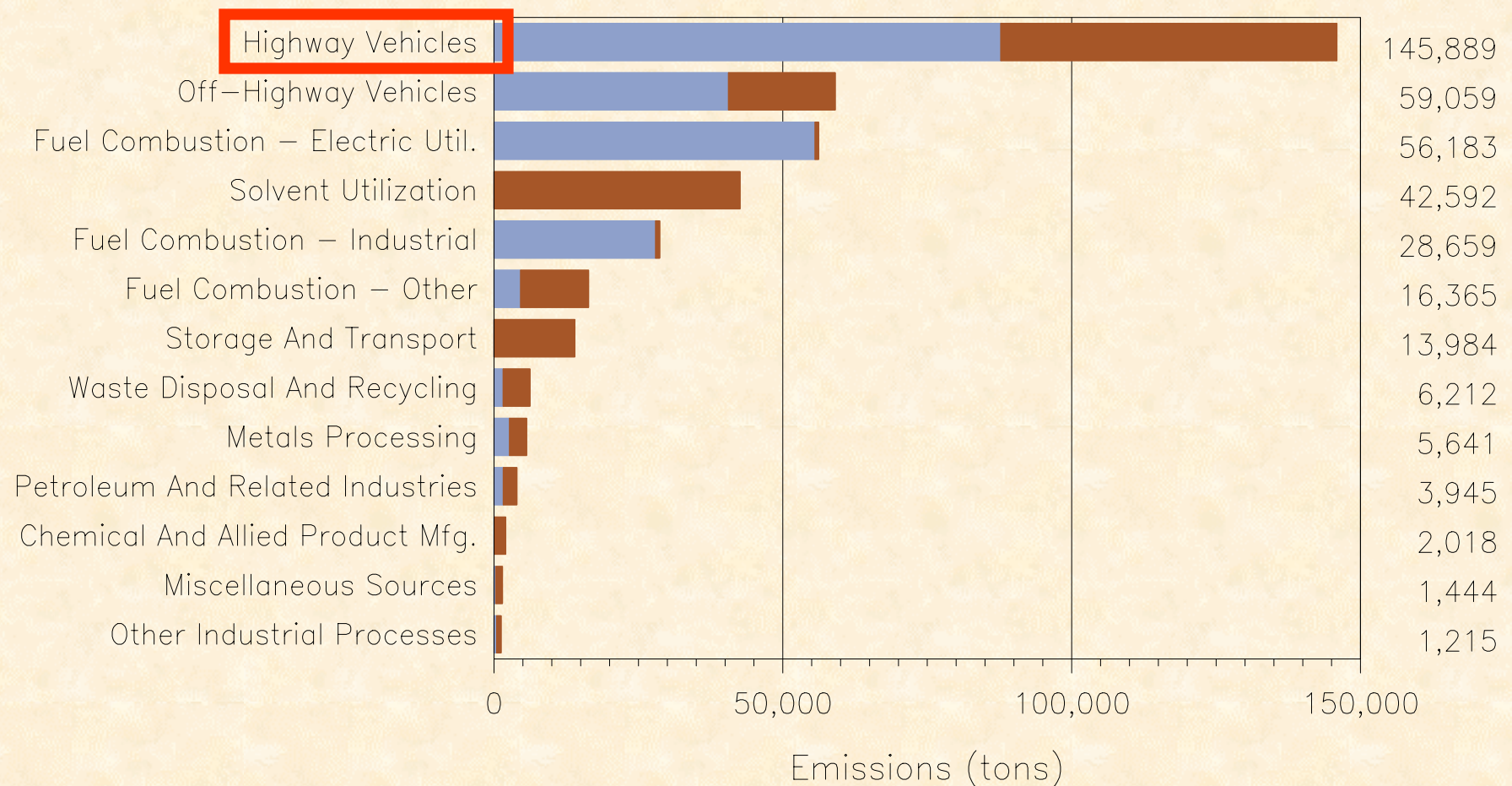
Vehicle Miles Traveled (VMT)



# Why is I/M Important for STL?

## 1999 Criteria Air Pollutants Emissions for STL MSA

NOx VOC





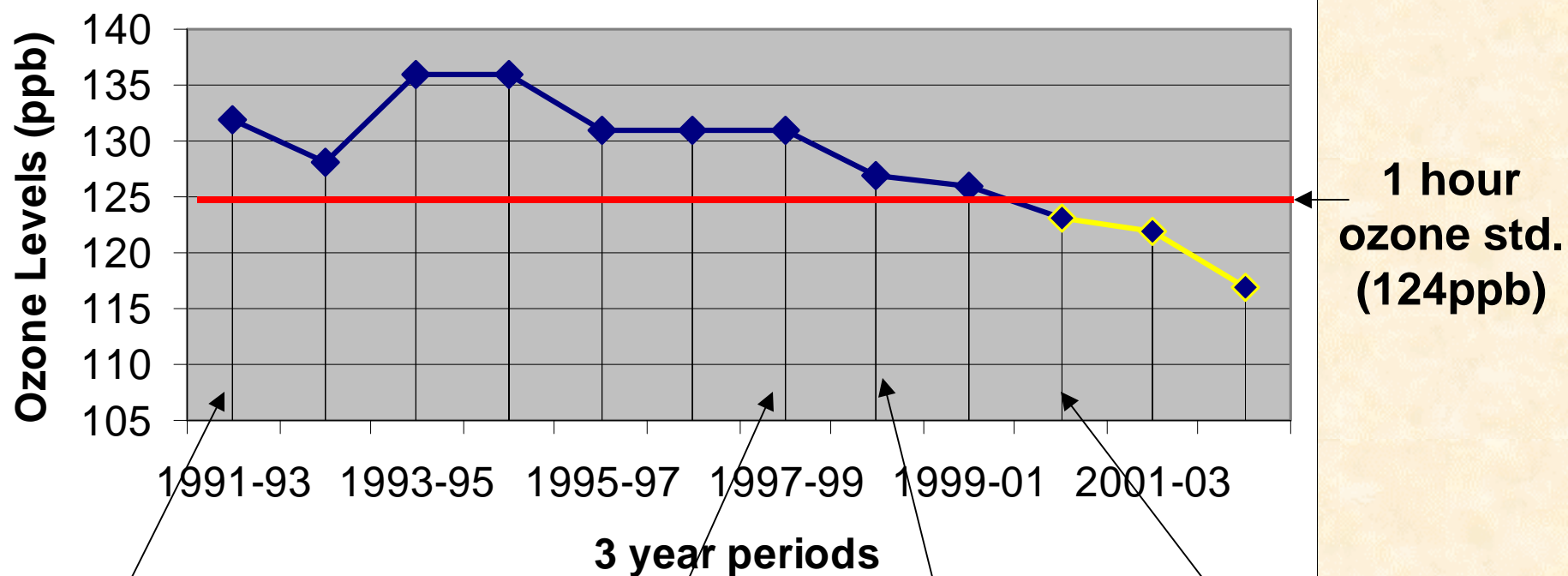
# **What has I/M Accomplished in St. Louis?**

- **Program began in 2000**
- **2,680,000 vehicle tests conducted**
- **11.7% failure rate**
- **61% passed retests**
- **Results in more than 190,000 vehicles repaired**
- **When a vehicle is repaired its emissions can be reduced by up to 80%**
- **Contributed 30% of the Rate of Progress Plan emissions reductions**



# How have the Air Quality & Fuel Standards Affected St. Louis?

## St Louis 1- Hour Ozone Design Values



1-hr ozone non-attainment (1991)

RFG Starts (1999)

15% ROPP (w/ I/M) approved (2000)

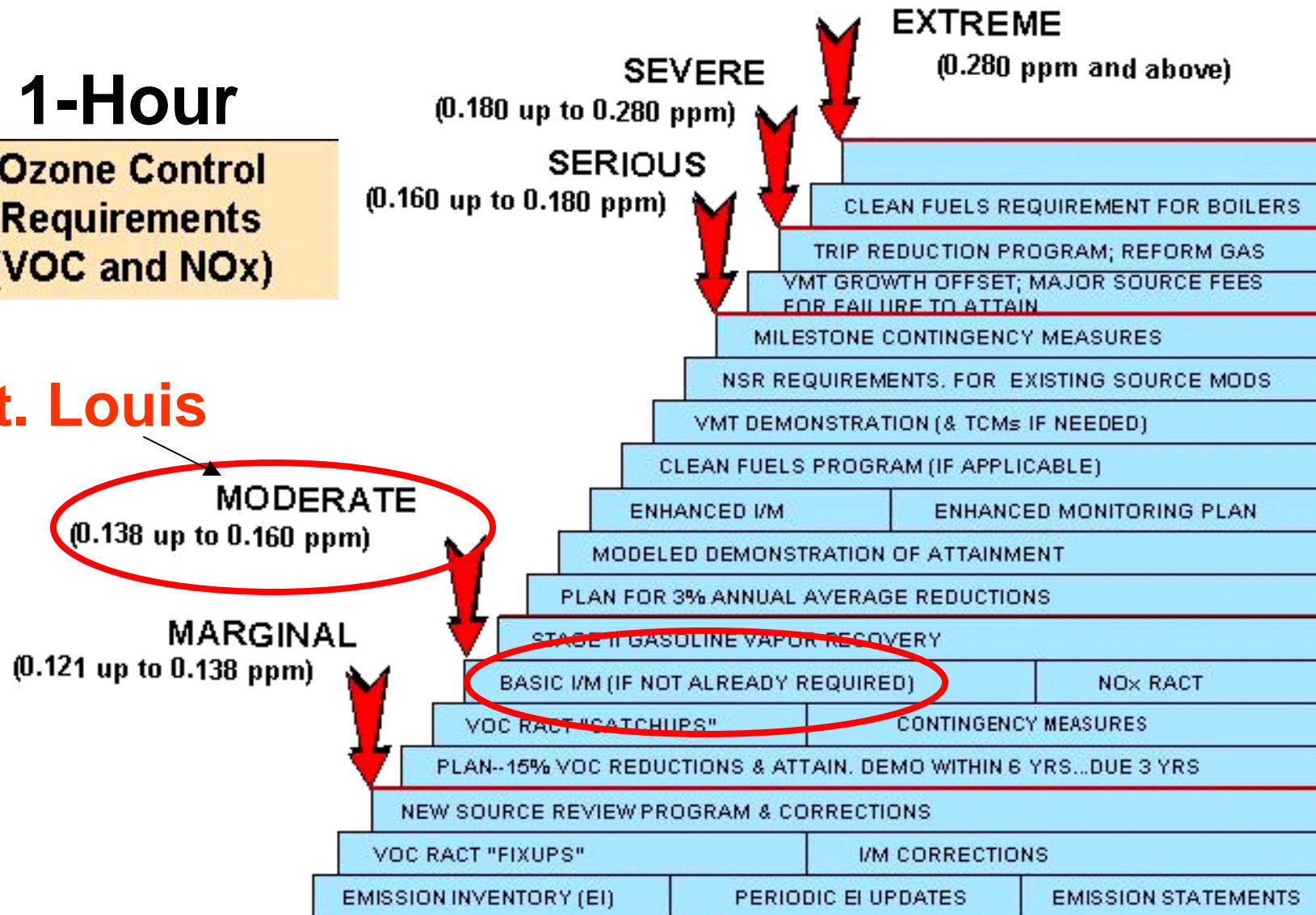
1-hr ozone attainment (2002)

# Why is I/M Required in St. Louis?

## 1-Hour

Ozone Control  
Requirements  
(VOC and NO<sub>x</sub>)

St. Louis



NOTE: All the above classifications are also required to do NSR and conformity.

# **Does the Change in Standards Affect I/M Requirements?**

- **St. Louis is “moderate non-attainment status” for 8-hr ozone standard**
- **Areas subject to Subpart 2 must continue to meet “applicable requirements”**
  - **Revisions may be made**
  - **Backsliding is not allowed i.e., mandatory measures cannot be removed from the SIP**



# What is Backsliding?

- 110 (l) of the CAA
  - ***The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of this Act.***

# **What Alternatives have Other Areas Considered?**

- Loss of emission credits from I/M program alterations require make-up credits to be found elsewhere
- Examples:
  - Louisville (BASIC NA) – has proposed to substitute I/M with stationary source reductions
  - Hamilton Co., KY (“Northern KY”) (BASIC NA) – has proposed to substitute I/M with area source reductions
  - Cincinnati, OH (BASIC NA) - removing I/M—not yet determined how will demonstrate noninterference for the 8-hour and PM<sub>2.5</sub> NAAQS

# **What are the Repercussions of Removing the I/M Program?**

- I/M required in moderate NA areas
- 110 & 179 of CAA – Sanctions for Failure to Implement
- Potential implementation of a Federal Program (110 CAA)
- Lawsuit always a possibility



**Questions???**